

Appendix A
Specification/Claim Amendments with Notations To Indicate Changes Made
Serial No.: Unknown (Parent Serial No. 09/407,818)
Filed: Herewith (Parent: September 28, 1999)
For: PRIMERS FOR USE IN DETECTING BETA-LACTAMASES

In the Specification

The following new section has been inserted at page 1, immediately following the "Title" heading:

--Statement of Related Applications

This application is a divisional of U.S. Patent Application Serial No. 09/407,818, filed September 28, 1999, entitled "Primers for Use in Detecting Beta-Lactamases," which claims the benefit of U.S. Patent Application Serial No. 60/102,181, filed September 28, 1998, entitled "Primers for Use in Detecting Beta-Lactamases," and U.S. Patent Application Serial No. 60/121,765, filed February 26, 1999, also entitled "Primers for Use in Detecting Beta-Lactamases." All three applications are incorporated herein by reference.--

In the Claims

12. **(Once Amended)** A primer selected from the group of:

5' - CGT CGC TCA CCA TAT CTC CC - 3' (SEQ ID NO:34); [and]

5' - CCT CTC GTG CTT TAG ACC CG - 3' (SEQ ID NO:35); and complements thereof.

13. **(Once Amended)** A primer selected from the group of:

5' - CGC TGG GAA ACC TAT TCG G - 3' (SEQ ID NO:36); [and]

5' - CTG CCA TCC AGT TTC TTC GGG - 3' (SEQ ID NO:37); and complements thereof.

14. **(Once Amended)** A primer selected from the group of:

5' - GGT GGC ATT GAC AAA TTC TGG - 3' (SEQ ID NO:38); [and]

5' - CCC ACC ATG CGA CAC CAG - 3' (SEQ ID NO:39); and complements thereof.

15. **(Once Amended)** A primer selected from the group of:

Appendix A

Page A2

Applicant(s): HANSON et al.

Serial No.: Unknown (Parent Serial No.: 09/407,818)

Filed: Herewith (Parent: September 28, 1999)

Title: PRIMERS FOR USE IN DETECTING BETA-LACTAMASES

5' - TGT GCA ACG CAA ATG GCA C - 3' (SEQ ID NO:40); [and]

5' - CGA CCC CAA GTT TCC TGT AAG TG - 3' (SEQ ID NO:41); and complements thereof.

16. **(Once Amended)** A primer selected from the group of:

5' - AGG CAC GAT AGT TGT GGC AGA C - 3' (SEQ ID NO:42); [and]

5' - CAC TCA ACC CAT CCT ACC CAC C - 3' (SEQ ID NO:43); and complements thereof.

17. **(Once Amended)** A method for identifying a beta-lactamase in a clinical sample, the method comprising:

providing a pair of oligonucleotide primers specific for nucleic acid characteristic of the OXA family of beta-lactamase enzymes, wherein one primer of the pair is complementary to at least a portion of the beta-lactamase nucleic acid in the sense strand and the other primer of each pair is complementary to at least a portion of the beta-lactamase nucleic acid in the antisense strand;

annealing the primers to the beta-lactamase nucleic acid;

simultaneously extending the annealed primers from a 3' terminus of each primer to synthesize an extension product that is complementary to the nucleic acid strands annealed to each primer wherein each extension product after separation from the beta-lactamase nucleic acid serves as a template for the synthesis of an extension product for the other primer of each pair;

separating the amplified products; and

analyzing the separated amplified products for a region characteristic of the beta-lactamase.

40. **(Once Amended)** The method of claim 39 wherein the primers are selected from the group of:

Appendix A

Page A3

Applicant(s): HANSON et al.

Serial No.: Unknown (Parent Serial No.: 09/407,818)

Filed: Herewith (Parent: September 28, 1999)

Title: PRIMERS FOR USE IN DETECTING BETA-LACTAMASES

5' - CGT CGC TCA CCA TAT CTC CC - 3' (SEQ ID NO:34); [and]

5' - CCT CTC GTG CTT TAG ACC CG - 3' (SEQ ID NO:35); and complements thereof.

42. **(Once Amended)** The method of claim 41 wherein the primers are selected from the group of:

5' - CGC TGG GAA ACC TAT TCG G - 3' (SEQ ID NO:36); [and]

5' - CTG CCA TCC AGT TTC TTC GGG - 3' (SEQ ID NO:37); and complements thereof.

44. **(Once Amended)** The method of claim 43 wherein the primers are selected from the group of:

5' - GGT GGC ATT GAC AAA TTC TGG - 3' (SEQ ID NO:38); [and]

5' - CCC ACC ATG CGA CAC CAG - 3' (SEQ ID NO:39); and complements thereof.

46. **(Once Amended)** The method of claim 45 wherein the primers are selected from the group of:

5' - TGT GCA ACG CAA ATG GCA C - 3' (SEQ ID NO:40); [and]

5' - CGA CCC CAA GTT TCC TGT AAG TG - 3' (SEQ ID NO:41); and complements thereof.

48. **(Once Amended)** The method of claim 47 wherein the primers are selected from the group of:

5' - AGG CAC GAT AGT TGT GGC AGA C - 3' (SEQ ID NO:42); [and]

5' - CAC TCA ACC CAT CCT ACC CAC C - 3' (SEQ ID NO:43); and complements thereof.

49. **(Once Amended)** A diagnostic kit for detecting [a TEM] an OXA family beta-lactamase which comprises packaging, containing, separately packaged:

Appendix A

Page A4

Applicant(s): HANSON et al.

Serial No.: Unknown (Parent Serial No.: 09/407,818)

Filed: Herewith (Parent: September 28, 1999)

Title: PRIMERS FOR USE IN DETECTING BETA-LACTAMASES

- (a) at least one primer pair capable of hybridizing to beta-lactamase nucleic acid of interest;
- (b) a positive and negative control; and
- (c) a protocol for identification of the beta-lactamase nucleic acid of interest.